



FOR EVERYTHING MARINE, **THINK AMI**

SMIDS Pro

Ship Speed and Distance Measuring
Equipment (SDME)

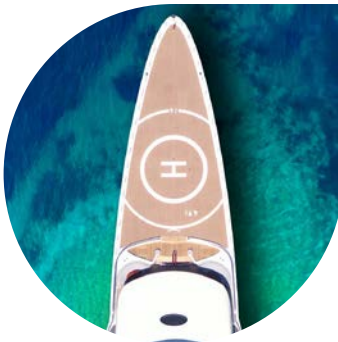
and

Transmitting Heading Device (THD)

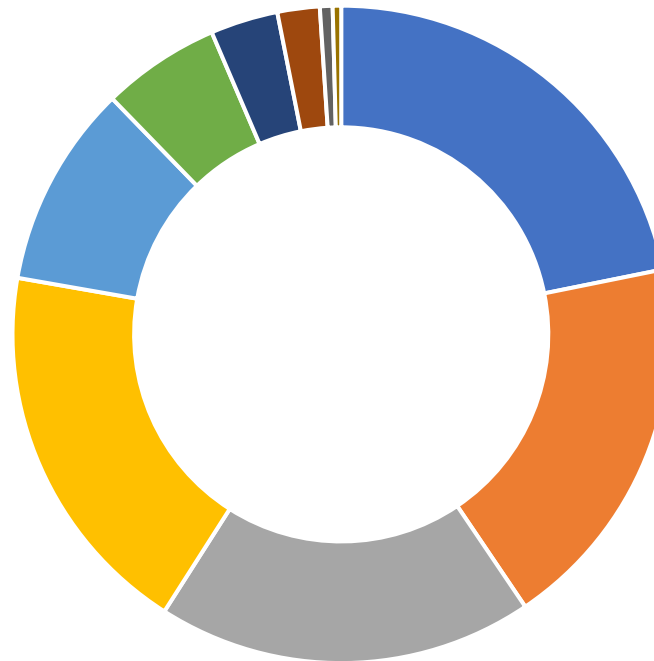
www.amimarine.com



- Founded in 1995, AMI Marine Ltd are a British manufacturer of bridge and navigation electronic equipment.
- We provide high quality technology ranging from docking assist systems to interfacing and data recording for vessel operators and owners of small commercial workboats to the largest VLCC vessels.
- AMI is a ISO 9001:2015 registered company and have achieved MED Type Approval on a number of products.



Client Vessel Types



- Chemical/Oil Products Tanker
- General Cargo Ship
- Bulk, Cement and Heavy Load Carrier
- LNG Tanker
- Passenger Cruise and Ro-Ro Cargo Ship
- Pusher Tug and Offshore Support Vessel
- Drilling Platform/Ship, FSO, Oil and VLCC Minelayer
- Naval RoRo Ship/Vehicle Carrier
- Hopper Dredger/Dredger
- Self-Discharging Bulk Carrier

SHIPS SPEED AND DISTANCE MEASUREMENT DEVICE

SMIDS MKIII is Commercial Maritime's most economic and accurate SDME (Speed Distance Measuring Equipment) system using state of the art technology to provide vessel Distance to Berth and Course Prediction options.

The system calculates and displays vessel movement information, reporting the ground speed of the vessel's heading, and sideways movement at the bow and stern, with an accuracy of 0.01 knots, assisting the navigating crew to make informed decisions in all sea states and weather conditions.

All vessel movement data is recoded and stored locally, with easy to use playback software supplied for future performance evaluations, training, and when necessary, incident investigation.

The system includes:

- Main Electronics Unit with 50+ days of data held on solid state storage media
- 15" Touch Screen Main Display
- 10.4" Internal Remote Touch Screen Display
- 10.4" External Remote Touch Screen Display (optional)
- 10" Tablet with Bluetooth transmitter (optional)
- Primary GNSS Compass Sensor with 2x Antennae (when THD is enabled)
- Secondary GNSS Sensor with Antenna
- 3 x NMEA Data Output Ports





APPROVED TO

- IEC 61023:2007 - Marine Speed and Distance Measuring Equipment (SDME)
- IEC 61108-1 and 2 - GPS and GLONASS Receiver Equipment
- ISO 22090-3:2014 – Transmitting Heading Device (THD)

BENEFITS

- Meets the requirement of MSC.334(90)
- Globally reliable, accurate and unaffected by detritus in river/estuary water, disturbed silt, or cavitation.
- Well suited to Northern passage routes.
- Simple retrofit while at sea; easier to install than a conventional Doppler Docking System.
- Suited to most commercial vessels, especially those where visibility is restricted on busy deck spaces.
- Stern, Bow distance to berth information to assist with berthing.
- Recall saved berths position data.
- Predictive Course indication.
- Logs journey time and total distance travelled

Approvals		Current SMIDS	SMIDS Pro
IEC 61023	Speed and Distance Measuring Equipment	☑	☑
IEC 61108-1	GPS Positioning Device	-	☑
ISO22090-3	Transmitting Heading Device		☑
Features (Data)		Current SMIDS	SMIDS Pro
Speed Over Ground (SOG) Indication		☑	☑
Cross Ship Speed at Bow and Stern		☑	☑
Along Ship Speed		☑	☑
Distance Run Display		☑	☑
Number of Satellites in Range		☑	☑
Satellite Signal Quality		☑	☑
Data Accuracy Indication		☑	☑
Latitude and longitude of Primary Antenna		☑	☑
Latitude and longitude of Secondary Antenna		-	☑
Cross Ship Acceleration at Bow and Stern		-	☑
Course Over Ground Indication at Bow and Stern		-	☑
Predictive Track Display		-	☑
Vessel Berthing Aid (Distance to Berth)		-	☑
GNSS Heading Display		-	☑
Gyro / GNSS Heading Comparator		-	☑
Voyage Log		-	☑
Mileage Log		-	☑
Data Logging for Investigation and Playback		-	☑

SMIDS Pro

Ship's SDME and THD

SMIDS MK2 vs SMIDS Pro continued



Information Display from Ship's Existing Sensors (where fitted)	Current SMIDS	The New SMIDS Pro
Gyro Heading Display (mandatory)	☑	☑
Water Speed Display (mandatory)	☑	☑
Rudder Angle Display	-	☑
Anemometer Display	-	☑
Depth Display	-	☑

Features (Hardware and Sensors)	Current SMIDS	The New SMIDS Pro
Multi Constellation GNSS Receivers	☑	☑
Handheld Tablet for SMIDS Information Display (non ATEX)	☑	☑
ATEX Zone 1 and 2 Handheld Tablet for SMIDS Information Display	☑	☑
15" Touch Screen Navigator's Display	-	☑
10.4" Touch Screen Remote Indoor Display	-	☑
10.4" Touch Screen IP65 Bridge Wing Display (Option)	-	☑

Features In Development	Current SMIDS	The New SMIDS Pro
Inclinometer Display (Integrated Output required)	-	☑
Echo Sounder (repeat numbers only on screen)	-	☑

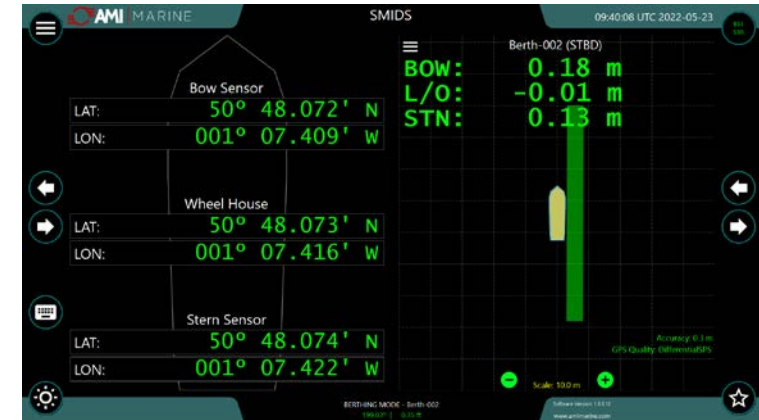
SMIDS Pro Ship's SDME and THD

System Screens Main Display



SMIDS Berthing Information Page

(Fore and Aft Speed, Bow/Stern Sideways Movement Speeds, Gyro Heading and Vessel Berthing Assist)



SMIDS Berth and Lat/Lon

(Vessel Berthing Assist and individual Bow/Stern Latitude and Longitude)



SMIDS Movement Page

(Comparator, Wind & Rudder Data)



Berth Selection Page

(Select saved locations or add to stored library)

SMIDS Pro

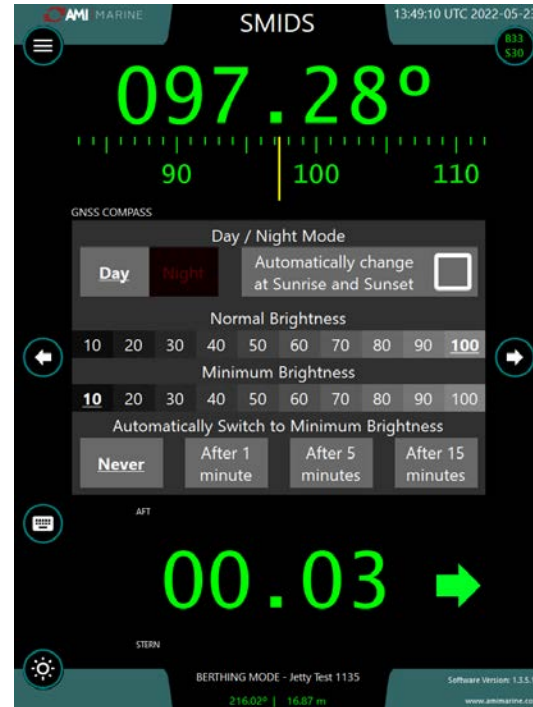
Ship's SDME and THD

System Screens

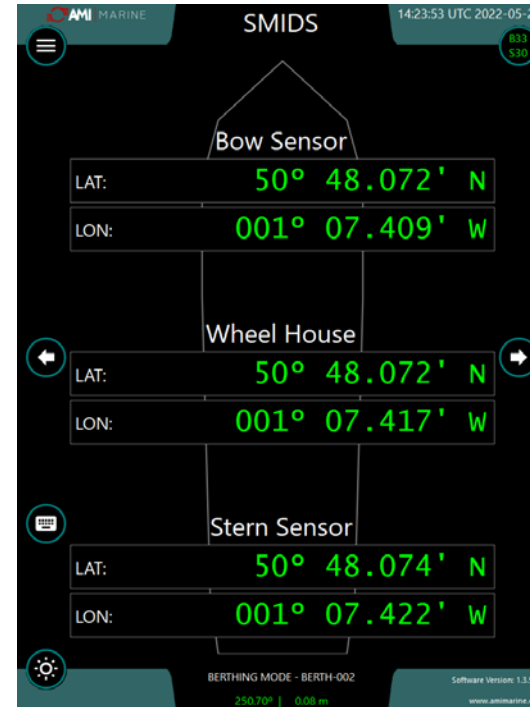
Heads-Up Display



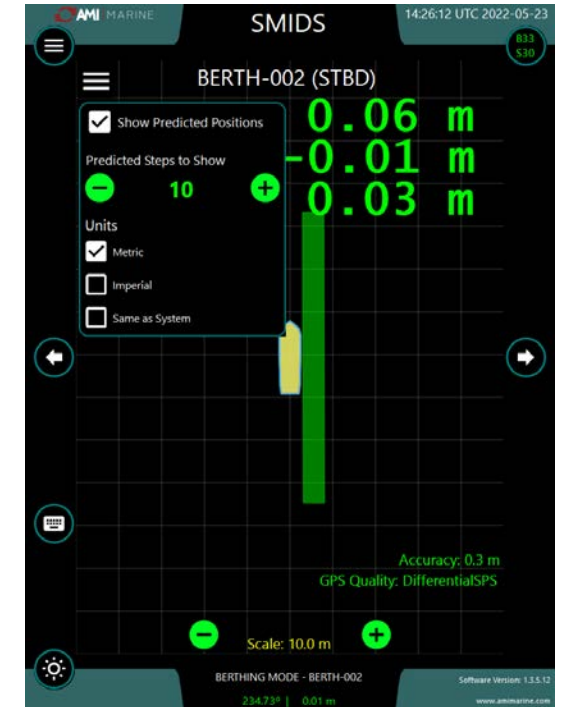
Main Page
(Fore and Aft Speed, Bow/Stern
Sideways Movement Speeds,
Gyro Heading)



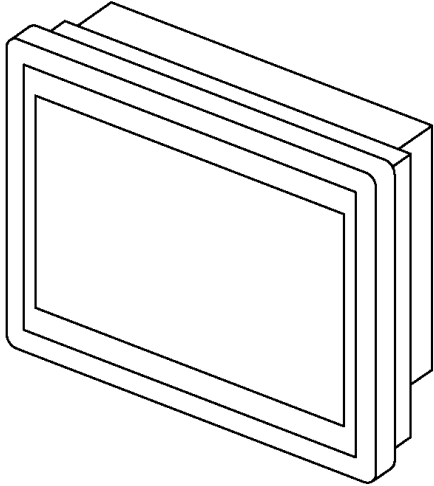
Main Page
(Day/Night and Brightness
Controls Panel)



SMIDS Lat/Lon
(Vessel individual Bow/Stern
Latitude and Longitude)



SMIDS Berthing Page
(Vessel Berthing Assist)

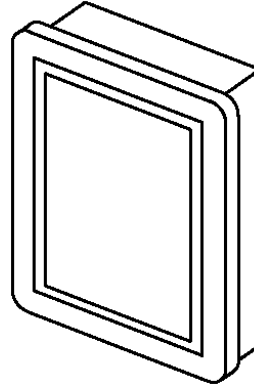


15" NAVIGATORS DISPLAY
DSP-0032

FEATURES:

- High Resolution (1920X1080)
- PCAP Touch Screen Display
- Manual Dimming Control
- Flush Mount and VESA Mount Option

POWER: 24v DC supplied by the MEU
DIMENSIONS: 415 x 290 x 61mm 2kg

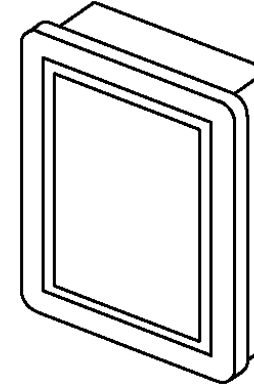


10.4" HEADS-UP DISPLAY
DSP-0033

FEATURES:

- Resolution of 768x1024
- PCAP Touch Screen Display
- Flush Mount and VESA Mount Options

POWER: 24v DC supplied by the MEU
DIMENSIONS: 296 x 236 x 46mm 2kg

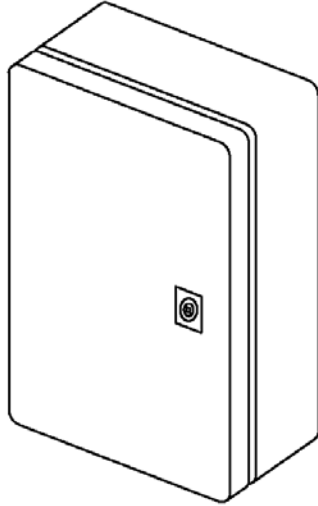


10.4" IP65 BRIDGE WING DISPLAY
DSP-0034

FEATURES:

- Resolution of 768x1024
- IP65 - PCAP Touch Screen Display
- Flush Mount and VESA Mounting Option

POWER: 24v DC supplied by the MEU
DIMENSIONS: 250 x 315 x 67mm 2kg



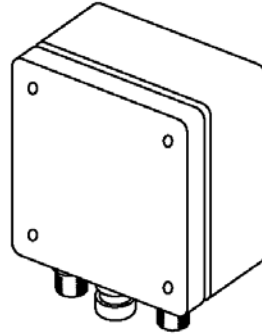
MAIN ELECTRONIC UNIT (MEU)
MEU-0021

FEATURES:

- NMEA Inputs for Nav Equipment
- NMEA Output (38,400 Baud Rate)
- Internal SSD for store 50+ Days of Data

POWER: 24v DC

DIMENSIONS: 300 x 400 x 155mm 8kg



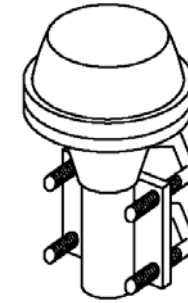
GNSS SENSOR INTERFACE
INT-0049

FEATURES:

- Data collection from Antenna to MEU

POWER: 24v DC supplied by the MEU

DIMENSIONS: 188 x 245 x 56mm 1.5kg



GNSS ANTENNA
ANT-0004

FEATURES:

- GNSS Data collection

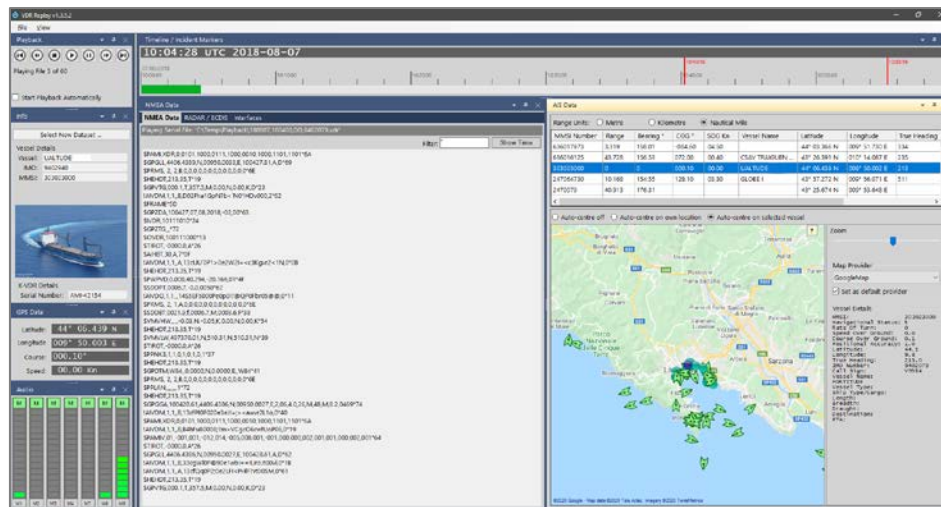
POWER: 5v DC supplied by the GNSS Sensor Interface

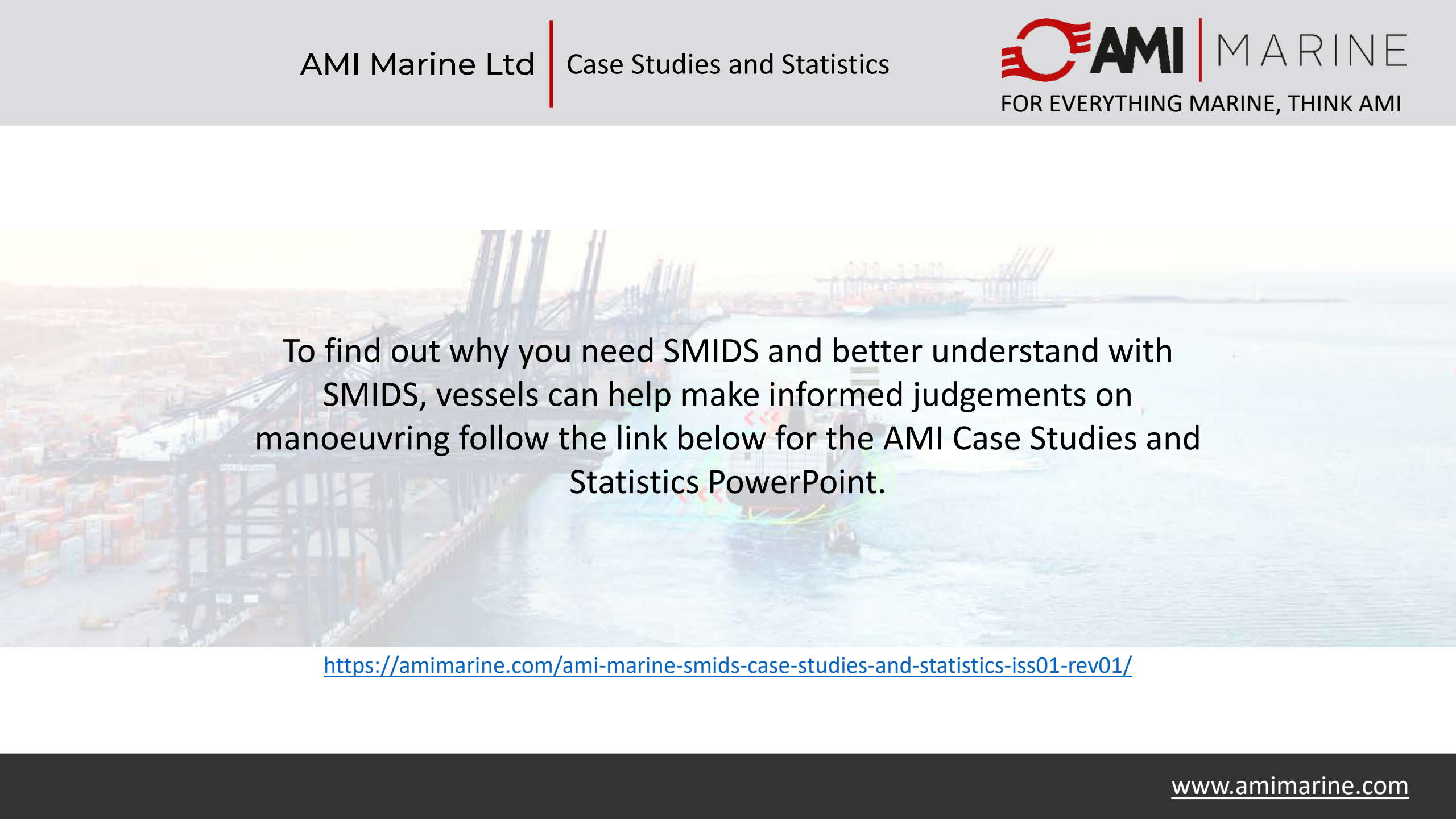
DIMENSIONS: 130 x 130 x 61mm 0.38kg

Replay Software

The AMI Marine Replay suite has many powerful features such as the **'Jump to Incident'** function, providing an intuitive interface for data review by engineers, ship's crew and accident investigators. Multiple mapping overlay options allow for mapping overlay of the recorded AIS and GPS information without regional restriction.

The data download process is simple and intuitive, using a laptop or Office PC connected to the Ethernet port of the Main Electronic Unit. The download application (provided) offers an open choice of date and time periods, along with download of the replay software, log and configuration files.





To find out why you need SMIDS and better understand with SMIDS, vessels can help make informed judgements on manoeuvring follow the link below for the AMI Case Studies and Statistics PowerPoint.

<https://amimarine.com/ami-marine-smids-case-studies-and-statistics-iss01-rev01/>



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THANK YOU FOR YOUR TIME

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